

# EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 10163263  
PUBLICATION DATE : 19-06-98

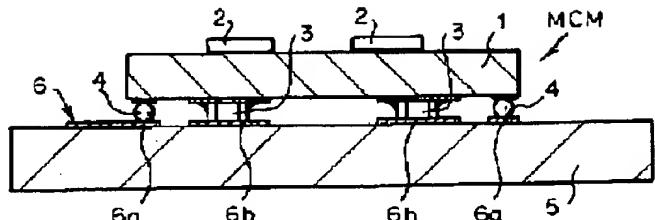
APPLICATION DATE : 29-11-96  
APPLICATION NUMBER : 08319467

APPLICANT : NEC CORP;

INVENTOR : SUZUKI MOTOHARU;

INT.CL. : H01L 21/60 H01L 25/04 H01L 25/18

TITLE : MOUNTING STRUCTURE FOR  
MULTICHIP MODULE



**ABSTRACT :** PROBLEM TO BE SOLVED: To prevent a multichip module having a plurality of chip components mounted from sinking due to its own weight caused by the crush of a BGA solder ball, and to prevent a chip component from coming into contact with the wiring pattern of a mother board and short-circuiting, on the occasion of mounting the multichip module on the mother board using BGA solder balls.

SOLUTION: Under the condition of mounting a multichip module MCM having chip components 2, 3 mounted on a board 1, on a mother board 5 by BGA solder balls 4, the chip component 3 is in contact with a mounting pad 6b as a dummy pad formed on the mother board 5. It becomes unnecessary to provide a clearance between the chip component 3 and the mother board 5, and it becomes possible to reduce the height of the mounting construction and to prevent the short circuit of the chip component 3 with wirings 6 on the mother board 5. It becomes unnecessary to increase the diameter of the BGA solder balls 4 more than needed to secure a clearance, and to use BGA solder balls containing metal cores, so it becomes possible to realize the size reduction of the mounting construction and the facilitation of constitution.

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# PATENT ABSTRACTS OF JAPAN

(11)Publication number : **10-163263**  
 (43)Date of publication of application : **19.06.1998**

(51)Int.CI.

**H01L 21/60**  
**H01L 25/04**  
**H01L 25/18**

(21)Application number : **08-319467**  
 (22)Date of filing : **29.11.1996**

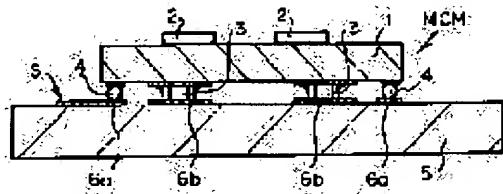
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## **(54) MOUNTING STRUCTURE FOR MULTICHIP MODULE**

### **(57)Abstract:**

**PROBLEM TO BE SOLVED:** To prevent a multichip module having a plurality of chip components mounted from sinking due to its own weight caused by the crush of a BGA solder ball, and to prevent a chip component from coming into contact with the wiring pattern of a mother board and short-circuiting, on the occasion of mounting the multichip module on the mother board using BGA solder balls.

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### **LEGAL STATUS**

[Date of request for examination] **29.11.1996**

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number] **2845227**

[Date of registration] **30.10.1998**

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's

[decision of rejection]

[Date of extinction of right]

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